Bruhat Bangalore Mahanagara Palike

Name of Work: Providing Structural roof covering (By space frames) over gallery to Hoysala Play Ground behind Yelahanka New Town Bus Stand in Ward No.04

Agency: Sri.H.V.Onkarappa

MEASUREMENT SHEET - RA BILL No.1st AND PART

Measurment taken on: 22-03-2017

From	To	Particulars	Unit	No	Length	Bredth	Depth	Quantity	Remarks
Item No.03	Providing and fixing 20mm thick gang saw water cut sadarhalli gray granite in CM 1:4 proportion , cut to required shape, pattern with paper joints, finished with cement mortar using white cement and colour pigments to match the colour of slab making through jointing with sealant, groves in joints including cost of curing with inclusive of all lead and lift and directions of the Engineer in charge of the work								
1) West side Gallery (North side to			Sqm						
1st Bay									
1st Riser				1	6.47		0.50	3.24	
1st Tread				1	6.47	0.90		5.82	
2nd Riser				1	7.30		0.45	3.29	
2nd Tread				1	7.30	0.90		6.57	
3rd Riser				1	8.20		0.45	3.69	
3rd Tread				1	8.20	0.90		7.38	
4th Riser				1	9.10		0.45	4.10	
4th Tread				1	9.10	1.17		10.65	
5th Riser				1	9.90		0.45	4.46	
2nd Bay									
1st Riser				1	14.40		0.50	7.20	
1st Tread				1	14.40	0.90		12.96	
2nd Riser				1	14.40		0.45	6.48	
2nd Tread				1	14.40	0.90		12.96	
3rd Riser				1	14.40		0.45	6.48	
3rd Tread				1	14.40	0.90		12.96	
4th Riser				1	14.40		0.45	6.48	
4th Tread				1	14.40	1.15		16.56	
5th Riser				1	14.40		0.45	6.48	
3rd Bay									
1st Riser				1	14.35		0.50	7.18	

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Contractor's Representative

Assistant Engineer
Project Sub Division

Assistant Executive Engineer
Project Division
Yelahanka Zone

Bruhat Bangalore Mahanagara Palike

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Agency: Sri.H.V.Onkarappa

MEASUREMENT SHEET - RA BILL No.1st AND PART

Measurment taken on: 22-03-2017

From	To	Particulars	Unit	No	Length	Bredth	Depth	Quantity	Remarks
1st Tread				1	14.35	0.90		12.92	
2nd Riser				1	14.35		0.45	6.46	
2nd Tread				1	14.35	0.90		12.92	
3rd Riser				1	14.35		0.45	6.46	
3rd Tread				1	14.35	0.90		12.92	
4th Riser				1	14.35		0.45	6.46	
4th Tread				1	14.35	1.15		16.50	
5th Riser				1	14.35		0.45	6.46	
4th Bay									
1st Riser				1	11.15		0.50	5.58	
1st Tread				1	11.15	0.90		10.04	
2nd Riser				1	11.15		0.45	5.02	
2nd Tread				1	11.15	0.90		10.04	
3rd Riser				1	11.15		0.45	5.02	
3rd Tread				1	11.15	0.90		10.04	
4th Riser				1	11.15		0.45	5.02	
4th Tread				1	11.15	1.15		12.82	
5th Riser				1	11.15		0.45	5.02	
Last Tread				1	56.35	1.40		78.89	
2) Steps									
1st Riser									
1st to 15th Riser				45	1.60		0.13	9.36	
1st to 15th Tread				42	1.60	0.30		20.16	
3) Granite Steps @ Skating gate									
1st Riser to 5th									
1st to 5th Riser				5	3.00		0.10	1.50	
1st to 5th Tread				5	3.00	0.28		4.20	

Contractor's Representative

Assistant Engineer
Project Sub Division

Asst. Executive Engineer
Project Division

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Bruhat Bangalore Mahanagara Palike

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Agency: Sri.H.V.Onkarappa

MEASUREMENT SHEET - RA BILL No.1st AND PART

Measurment taken on: 22-03-2017

From	To	Particulars	Unit	No	Length	Bredth	Depth	Quantity	Remarks
4) South Side Gallery									
1st Landing				1	70.50	0.70		49.35	
1st Riser				1	70.50		0.40	28.20	
1st Tread				1	70.50	0.93		65.57	
2nd Riser				1	70.50		0.42	29.61	
2nd Tread				1	70.50	0.94		66.27	
3rd Riser				1	70.50		0.42	29.61	
3rd Tread				1	70.50	1.05		74.03	
4th Riser				1	70.50		0.43	30.32	
4th Tread				1	70.50	1.35		95.18	
5) Staircase @ Shuttle court (at 90.50 RL)									
Landing				1	4.85	1.20		5.82	
Riser				24	1.00		0.15	3.60	
Tread				22	1.00	0.32		7.04	
6) Staircase @ office (Ladies & Gents Toilet)									
Landing				1	4.50	1.25		5.63	
Riser				32	1.05		0.15	5.04	
Tread				30	1.05	0.32		10.08	
VVIP Gallery Connecting slab 2 side steps, Passage									
7) Connecting slab blw VIP to VIP Gallery									
Slabs				1	9.00	1.70		15.30	
Staircase									
Tread				12	1.70	0.30		6.12	
Riser				14	1.70	0.15		3.57	
							Total Qty	938.99	

Contractor's Representative

Assistant Engineer
Project Sub Division

Assistant Executive Engineer
Project Division

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Bruhat Bangalore Mahanagara Palike

Name of Work: Providing Structural roof covering (By space frames) over gallery to Hoysala Play Ground behind Yelahanka New Town Bus Stand in Ward No.04

Agency: Sri.H.V.Onkarappa

MEASUREMENT SHEET - RA BILL No.1st AND PART

Measurment taken on: 22-03-2017

From	To	Particulars	Unit	No	Length	Bredth	Depth	Quantity	Remarks
Item No.04	Providing chain link fencing 50mm size of 8 guage properly stretched between rectangular poles and fixed with suitable bolts & nuts, the free ends shall be welded to the pole and block pipe at top and bottom as required including cost of all materials, labour, lead and lifts and as per the directions of the Engineer-in-charge of work including two coats of approved quality paint over one coat of shop paint with inclusive of all lead and lift and directions of the Engineer in charge of the work								
Bifurcation between 90.00 RL & 90.50 RL			Sqm						
From North to south side gallery				1	72.00	2.90		208.80	✓
Bifurcation between Skating & Shuttle court				1	19.10	2.90		55.39	✓
							Total Qty	**264.19**	✓

Contractor's Representative

Assistant Engineer
Project Sub Division

Asst. Executive Engineer
Project Sub Division

(17)

Bruhat Bangalore Mahanagara Palike

Name of Work: Providing Structural roof covering (By space frames) over gallery to Hoysala Play Ground behind Yelahanka New Town Bus Stand in Ward No.04

Agency: Sri.H.V.Onkarappa

MEASUREMENT SHEET - RA BILL No.1st AND PART

Measurment taken on: 22-03-2017

From	To	Particulars	Unit	No	Length	Bredth	Depth	Quantity	Remarks
Item No.5		Providing and fixing M.S. Hand railing for Balcony/Staircase etc., with 50mm dia. M.S. hollow pipe of 14 gauge, welded to 20mmx20mm M.S. square rod placed vertically, spaced at 100mm at regular intervals of 600mm. These vertical rods laterally tied to 3 horizontal rods spaced at equal interval. These assembly is fixed to concrete by using expansion bolts and welding the same to reinforcement bars and making good the surface. All the joints and sections hould be cut to length, welded and grinded wherever necessary etc., complete . The work includes cost of all materials, labour charges for all items of work, hire charges for welding, cutting and grinding equipment, and electricity charges, etc., complete as per specification and drawing with inclusive of all lead and lift and directions of the Engineer in charge of the work							
Frant of Security Room			Sqm						
				1	8.95		0.95	8.50	(6.95+2)
Between Approach gallery west side gallery									
				1	7.75		0.95	7.36	
				1	5.85		0.95	5.56	
				1	2.70		0.95	2.57	
VIP Gallery gym room backside column									
				2	6.00		0.60	7.20	
				2	6.80		0.60	8.16	
				2	1.10		0.60	1.32	
North entrance gallery end side									
				2	4.20		0.95	7.98	
				2	1.00		0.95	1.90	
Gate west side gallery & VIP Gallery				1	1.55		2.45	3.80	
							Total Qty	54.35	

Contractor's Representative

Assistant Engineer
Project Sub Division

Asst. Executive Engineer
Project Division

(18)

Bruhat Bangalore Mahanagara Palike

Name of Work: Providing Structural roof covering (By space frames) over gallery to Hoysala Play Ground behind Yelahanka New Town Bus Stand in Ward No.04

Agency: Sri.H.V.Onkarappa

MEASUREMENT SHEET - RA BILL No.1st AND PART

Measurment taken on: 22.03.2017

From	To	Particulars	Unit	No	Length	Bredth	Depth	Quantity	Remarks
Item No.6	Supplying and fixing M.S. Rectangular poles made out of 2 equal angles of 65x65x6 mm welded together and fixed in CC (1:2:4) WITH 2 NOS 16mm dia M.S. hold fast rods each of length 25 cms. Including cost of all materials cutting, bending scaffolding wherever necessary, nicely finishing the welded joints with all lead lifts and as per the directions of the Engineer-in - charge of the work and including providing 2 coats of approved quality paint over one coat of shop painting (excluding cost of earthwork and concrete) with inclusive of all lead and lift and directions of the Engineer in charge of the work								
Bifurcation between 90.00 RL & 90.50 RL		Mtr							
			19	3.45				65.55	✓
Skating & Shuttle Court			13	2.90				37.70	✓
							Total Qty	103.25	✓

Contractor's Representative

Assistant Engineer
Project Sub Division

Asst. Executive Engineer
Project Division

(19)

Bruhat Bangalore Mahanagara Palike

Name of Work: Providing Structural roof covering (By space frames) over gallery to Hoysala Play Ground behind Yelahanka New Town Bus Stand in Ward No.04

Agency: Sri.H.V.Onkarappa

MEASUREMENT SHEET - RA BILL No.1st AND PART

Measurment taken on: 22-03-2017

From	To	Particulars	Unit	No	Length	Bredth	Depth	Quantity	Remarks
Item No.7	Providing and fixing M.S. Block pipe of 38mm dia, of heavy guage of 14 including removing the bends, cutting the pipe, and fixing pipe in between the two verticle poles (M.S. rectangular poles) and spot welding the chain link with M.S. block pipe including cost of all materials wastage in cutting, and scaffolding wherever necessary with all lead and lift as directed by the Engineer-in-charge of work etc., complete including two coats of approved quality paint over one coat of shop paint with inclusive of all lead and lift and directions of the Engineer in charge of the work								
			Mtr						
				4	1.35			5.40	
Gate (Horizontal)				4	1.25			5.00	
Gate (Verticle)				2	2.05			4.10	
Above Gate				2	1.35			2.70	
				4	1.10			4.40	
				4	2.92			11.68	
				4	2.90			11.60	
				4	2.95			11.80	
				4	2.95			11.80	
				4	2.95			11.80	
				4	2.95			11.80	
				4	2.95			11.80	
				4	2.95			11.80	
				4	2.90			11.60	
				4	2.90			11.60	
				4	3.65			14.60	
				4	2.90			11.60	
				4	2.95			11.80	
				4	2.90			11.60	
				4	2.90			11.60	
				4	2.95			11.80	

Contractor's Representative

Assistant Engineer
Project Sub Division

Assistant Executive Engineer
Project Sub Division

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Bruhat Bangalore Mahanagara Palike

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Agency: Sri.H.V.Onkarappa

MEASUREMENT SHEET - RA BILL No.1st AND PART

Measurment taken on: 22-03-2017

From	To	Particulars	Unit	No	Length	Bredth	Depth	Quantity	Remarks
				4	2.95			11.80	
				4	2.90			11.60	
				4	2.90			11.60	
				4	2.95			11.80	
				4	2.90			11.60	
				4	2.85			11.40	
				4	3.05			12.20	
Gate (Verticle)				2	2.00			4.00	
				4	3.10			12.40	
				4	3.10			12.40	
				4	3.10			12.40	
				4	3.10			12.40	
				4	3.10			12.40	
							Total Qty	359.88	

Contractor's Representative

Assistant Engineer
Project Sub Division

Asst. Executive Engineer
Project Division
Yelahanka Zone

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Bruhat Bangalore Mahanagara Palike

Name of Work: Providing Structural roof covering (By space frames) over gallery to Hoysala Play Ground behind Yelahanka New Town Bus Stand in Ward No.04

Agency: Sri.H.V.Onkarappa

MEASUREMENT SHEET - RA BILL No.1st AND PART

Measurment taken on: 22-03-2017

From	To	Particulars	Unit	No	Length	Bredth	Depth	Quantity	Remarks
Item No.8	Providing precast Eurocon Tiles, Red colour for footpath 20mm thick using marble chips at 7-10 nominal size laid on bed CM 1:3 mix and jointed with red oxide cement slurry mixed pigment to match the shade to tiles, rubbing, polishing oxalic acid wash, wax polish included cost of materials and labour... with inclusive of all lead and lift and directions of the Engineer in charge of the work								
Skating Alround			Sqm						
Skating Gate side				1	34.20		2.10	71.82	
Skating East gallery Side				1	34.20		1.80	61.56	
Skating South gallery				1	15.20		1.80	27.36	
Skating Volley ball side				1	15.20		2.10	31.92	
VVIP Portico				1	10.90		3.67	40.00	L=(9.3+12.5)/2 and D=(3.8+3.56)/2
							Total Qty	232.66	

Contractor's Representative

Assistant Engineer
Project Sub Division

Asst. Executive Engineer
Project Division
Yelahanka Zone

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From	To	Particulars	Unit	No	Length	Bredth	Depth	Quantity	Remarks
Item No.9		Providing and fixing M.S. Grill over existing compound wall as per using 16mm x 16mm M.S. Square rod at 150mm c/c spacing and 6mm x 40mm M.S. flats at horizontal and 6mm x12mm M.S. flat for ornamental design and providing shop edge design at the vertex of every vertical rods, including welding, grinding wherever necessary. All the steel surface should be thoroughly cleaned free of rust and painted with anti corrosive paint (shop paint) etc., complete. The work includes cost of all materials, labour charges for all items of work, hire charges for welding, cutting and grinding equipment, and electricity charges, etc., complete as per specification, with inclusive of all lead and lift and directions of the Engineer in charge of the work							
Above Compound wall Grill			Sqm						
East Side gallery parapet wall @ bus stand side				1	78.70		0.60	47.22	
Pavilion front side building compound				1	1.90		0.55	1.04	(0.65+0.44)/2
				1	3.70		0.53	1.94	(0.65+0.4)/2
				6	2.35		0.53	7.40	(0.65+0.4)/2
				1	0.80		0.53	0.42	(0.65+0.4)/2
				1	2.50		0.53	1.31	(0.65+0.4)/2
				1	2.50		0.53	1.31	(0.65+0.4)/2
				7	2.17		0.53	7.97	(0.65+0.4)/2
				1	2.00		0.53	1.05	(0.65+0.4)/2
				1	3.00		0.53	1.58	(0.65+0.4)/2
							Total Qty	71.25	

71.24

Assistant Engineer

Asst. Executive Engineer